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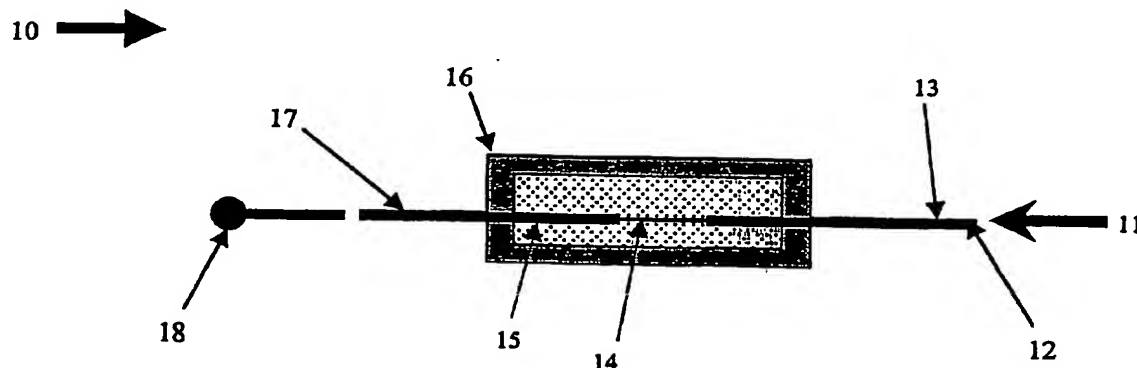
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(54) Title: FIBER OPTIC BIO-SENSOR



(57) Abstract: A sensor for sensing and monitoring a property associated with transformation of a biochemical analyte by a micro-organism, the sensor comprising a glass permeable coating applied to an unclad portion (14) of a fibre optic member (13). The coating has a transformable precursor impregnated into it, the precursor being specifically metabolisable by one or more targeted organisms. When the sensor is placed in contact with a sample in a container (15) contacting an active targeted micro-organisms, the precursor is transformed by the micro-organisms to produce a spectroscopically detectable indicator of the property of the analyte. Spectroscopic information may be analysed by a computer program to provide an overall index of microbiological activity for the targeted micro-organism. The invention extends to a method of producing a sensor and a method of identifying the presence of a targeted micro-organism.

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